

**AMENDMENTS TO THE DRAWINGS:**

Please replace the sole figure, with the attached FIG. 1 and FIG. 2:

**AMENDMENTS TO THE SPECIFICATIONS:**

Please replace the abstract of the disclosure, with the following rewritten paragraph:

-- An X-ray detector module (1) is provided, in which a preferably metallic carrier (3) forms tubular cells (4) in which there is provided a mixture of a binder (7) and scintillator particles (6). The absorption of X-rays by the scintillator particles (6) gives rise to the emission of light of a longer wavelength ( $\lambda_1, \lambda_2$ ) that can be detected by a detector (5) arranged at the far end of the cells (4). In order to keep the light yield as high as possible, a difference of less than 20% is pursued between the refractive indices of the binder (7) and the scintillator particles (6) and/or nano-crystalline scintillator particles (6) of a size of between 1 and 100 nm are used. Preferably, the cell walls (3, 3') are extended in the direction of incidence of the X-rays in order to form an anti-scatter grid above the detector. --

Please replace paragraph 3 of page 4, with the following rewritten paragraph:

-- The surfaces of the carrier can be provided at least partly with a reflector layer which has a degree of reflection of more than 90%, that is, preferably more than 97% for light in the range of the wavelength  $\lambda$ . Notably the surfaces of the carrier that form the cell walls should be provided with such a reflector layer so as to ensure that the light that is generated in the scintillator mass is reflected at the walls of the cells and hence is not lost to the detection process. The reflector layer preferably consists of a white powder that contains  $\text{TiO}_2$  and has a layer thickness of typically from 10 to 50  $\mu\text{m}$ . A vapor-deposited metal layer of, for example, silver

Ag, aluminum Al or the like can be used alternatively or additionally. The latter is advantageous notably in the case of structured glass. --

Please replace paragraph 2 of page 6, with the following rewritten paragraph:

-- The invention will be described in detail hereinafter, by way of example, with reference to the Figures.

Fig. 1 is a diagrammatic cross-sectional view of three representative cells of an X-ray detector module in accordance with the invention; and

Fig. 2 is a diagrammatic cross-sectional view of an alternate embodiment of the present invention showing three representative cells of an X-ray detector module in accordance with the invention. --

Please replace paragraph 3 of page 6, with the following rewritten paragraph:

-- Referring to FIG. 1, the X-ray detector module 1 is formed by cells 4 that are arranged in a grid structure. The grid structure is formed by way of a carrier which comprises vertical cell walls 3 (as viewed in the Figure) that separate the individual cells 4 from one another. The cells 4 have a column-like or tube-like appearance with a round or preferably a polygonal, notably a rectangular cross-section, the height  $h$  of the cells amounting to approximately three times the width  $b$  of the cells. Within the cells 4 there is provided a matrix that consists of a binder 7 and scintillator particles 6 that are embedded therein and are graphically represented by spheres in the central cell in the figure. --

Please replace the last paragraph of page 7, with the following rewritten paragraph:

-- In a further embodiment of the X-ray detector module in accordance with the invention, as shown in FIG. 2, the walls or grid segments 3 of the carrier that separate the cells 4 from one

another may also be given a greater height  $h'$ , so that in the upwards direction they extend beyond the filling that consists of the scintillator material 6, 7. The projecting part 3' of the grid walls 3 would then act as an anti-scatter grid, which means that X-rays that are incident at an angle are absorbed and only the radiation that is incident essentially parallel to the walls can reach the scintillator material. Such a raised configuration of the grid segments simply results in a combination of a scintillator and an anti-scatter grid wherein exact association in space of the two elements is ensured. --